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## 1N4444 General Purpose Silicon Rectifier DO-35 Type Package

### **Absolute Maximum Ratings:**

Continuous Reverse Voltage, $V_R$ .....	50V
Average Forward Current, $I_F(AV)$ .....	200mA
Repetitive Peak Forward Current, $I_{FPM}$ .....	600mA
Forward DC Current, $I_F$ .....	250mA
Non-Repetitive Peak Forward Current ( $t = 1\mu s$ ), $I_{FSM}$ .....	4A
Total Power Dissipation, $P_{tot}$ .....	500mW
Operating Junction Temperature Range, $T_J$ .....	-65° to +200°C
Storage Temperature Range, $T_{stg}$ .....	-65° to +200°C
Lead temperature (During Soldering, 1/16" from case, 10sec) .....	+300°C

### **Electrical Characteristics:** ( $T_A = +25^\circ C$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	$V_F$	$I_F = 0.1\text{mA}$	440	-	550	mV
		$I_F = 1\text{mA}$	560	-	680	mV
		$I_F = 10\text{mA}$	690	-	820	mV
		$I_F = 100\text{mA}$	850	-	1000	mV
Breakdown Voltage	$V_{(BR)R}$	$I_R = 5\mu A$	70	-	-	V
Reverse Current	$I_R$	$V_R = 50V$	-	-	50	nA
		$V_R = 50V, T_A = +150^\circ C$	-	-	50	$\mu A$
Diode Capacitance	$C_o$	$V_R = 0$ , Note 1	-	-	2	pF
Reverse Recovery Time	$t_{rr}$	$I_F = I_R = 10\text{mA}$ , Recover to 1mA	-	-	7	ns

